Five-Year Plan 2005 - 2010

Lake Champlain Ecosystem Team

The mission of the Lake Champlain Ecosystem Team is to maintain and enhance the ecological integrity of the Lake Champlain watershed. This is accomplished by enhancing interdisciplinary cooperation and partnerships among Federal, State and private conservation organizations and academic institutions and facilitating biological resource conservation activities, exchanging information and seeking funding.

The Lake Champlain Ecosystem Team is a group of conservation and research professionals from a wide variety of organizations working in the Lake Champlain Basin. Team membership is informal and fluid, including over 50 participants since 1993. The participation of individual members depends largely on the focus of the Team's activities at any given time. Generally, the Team attempts to approach conservation issues with an appreciation of the entire ecosystem and address conservation needs considering sustainability and landscape-level aspects of the ecosystem.

This Five-Year Plan provides additional focus to the Team's effort, directing additional energy toward some specific actions. These actions were selected by the Team based on recognition of current conservation issues with a particularly high profile and importance to the organizations involved in the Team. Accordingly, this Five-Year Plan focuses on fish and wildlife habitat conservation, dam removal, endangered species, and invasive species. The Lake Champlain Ecosystem Team will also continue to support ongoing efforts to manage important species and their habitats in an ecologically sustainable manner in the Lake Champlain Basin, regardless of whether such ongoing efforts are specifically included in the goals, objectives and actions listed below.

Goal 1: Protect, conserve and restore habitat to maintain and enhance ecological integrity of the Lake Champlain watershed.

Objectives:

A. Natural resource agencies, related university programs, and non-governmental organizations in the Basin will conserve habitat by identifying, restoring, enhancing and maintaining critical habitats and habitat connections throughout the Lake Champlain Basin.

Actions:

1. Continue and expand stream and riparian restoration activities.
2. Identify and conserve priority wetland and forest habitats in the Lake Champlain Basin.
3. Protect and manage important grassland bird habitats for breeding and migratory birds.
4. Identify and promote opportunities for use of existing programs to encourage natural community habitat viability and restoration and expand agency cost-

sharing programs for stream restoration, riparian habitat and river corridor protection, and installation of riparian/wetland buffer strips.
5. Use ecological indicators to monitor change and detect impacts of management actions.
6. Develop and provide training in field assessment protocols for managers and local watershed organizations.

B. Provide public information about benefits of dam removal and assess potential effects of dam operation and removal on stream and wetland structure and function.

Actions:

1. Develop an inventory of existing impediments to fish passage in the Lake Champlain basin.
2. Identify key government and non-government organizations with authority to affect implementation of dam removal projects.
3. Encourage the establishment of a coordinated, interagency dam removal task force for the Lake Champlain basin.
4. Conduct education and outreach to provide information that describes the benefits of dam removal.

C. Improve protection strategies for managing threatened and endangered species and rare natural communities.

Actions:

1. Identify and promote opportunities for use of existing programs to support natural community habitat viability and restoration in impacted areas.
2. Identify efforts by resource groups to identify and conserve rare, threatened, endangered and declining species and their habitats and set priorities to fill in the gaps.
3. Support ongoing efforts to restore rare, threatened, endangered and declining species including (but not limited to) lake sturgeon, native mussels, spiny softshell turtles, sauger, beach pea, Lake Champlain beachgrass, Indiana bats and bald eagles to the Lake Champlain basin.

Goal 2: Prevent and minimize negative impacts of invasive species to maintain and enhance the ecological integrity of the Lake Champlain watershed.

Objectives:

A. Major natural resource agencies, related university programs, and non-governmental organizations in the Basin will implement early detection and rapid response capability and other effective, coordinated management of invasive species.

Actions:

1. To minimize uncertainty that impedes rapid response to alewife invasion, support surveys to determine whether alewives have become established in Lake Champlain.

2. Continue to explore and implement alternatives for management to prevent the spread of alewives within and beyond the Lake Champlain Basin.
3. Encourage voluntary efforts and enforcement of existing laws to control the transport of invasive species.
4. Identify and promote early detection of invasive species
5. Seek enhanced funding and staff resources for more effective invasive species management by natural resources agencies and organizations in the Lake Champlain Basin.
6. Establish mechanisms (such as "swat teams") for use of accepted best management practices in removal of newly identified populations of invasive species. Encourage development of new funding mechanisms and programs where needed to provide natural resource agency support for rapid response to invasive species by paid staff, youth conservation corps, volunteers, incentives, etc.
7. Encourage development of Hazard Analysis and Critical Control Points plans (HACCP plans) for private and public organizations with significant potential to cause inadvertent species introductions through business and resource management practices.
8. Review and evaluate existing invasive species laws, regulations, and permit review processes throughout the Lake Champlain Basin. Pursue changes and coordinate new legislation to regulate pathways of invasive species introduction including trade in and use of bait, live seafood and the pet trade, as appropriate, striving to make laws consistent and efficient throughout the Basin.

B. Encourage research programs to actively investigate introduction, spread prevention, ecological effects, distribution and control methods of invasive species.

Actions:

1. Investigate ecological implications of invasive species in Basin.
2. Investigate, evaluate and demonstrate exclusion devices for invasive species.
3. Evaluate and demonstrate Eurasian watermilfoil control strategies.
4. Determine the best techniques for establishing native vegetation following removal of populations of invasive plants.
5. Research and promote best management practices for invasive species which are based on ecologic sensitivities of non target species, the geography of invasion, size of invasive populations and the most efficient and expeditious use of public resources.
6. Investigate the role of recreational boating as a vector of new invasive species introductions.
7. Evaluate and demonstrate the success of purple loosestrife biocontrol.

C. Increase public awareness to encourage proactive prevention and control of invasive species.

Actions:

1. Maintain and improve the dialogue with canal stakeholders regarding the role of canals as a vector for invasive species introductions to Lake Champlain.
2. Develop a program to enhance awareness among fishing tournament organizers and participants to prevent invasive species introductions by participants.
3. Increase awareness among anglers, bait dealers, pet store owners, plant nurseries, aquaculturists, and other stakeholders about the risks and impacts of invasive species introductions.
4. Maintain an alliance with the Northeast Aquatic Nuisance Species Panel to support training for the Lake Champlain Ecosystem Team and enhance the Team's up-to-date awareness of emerging invasive species issues.